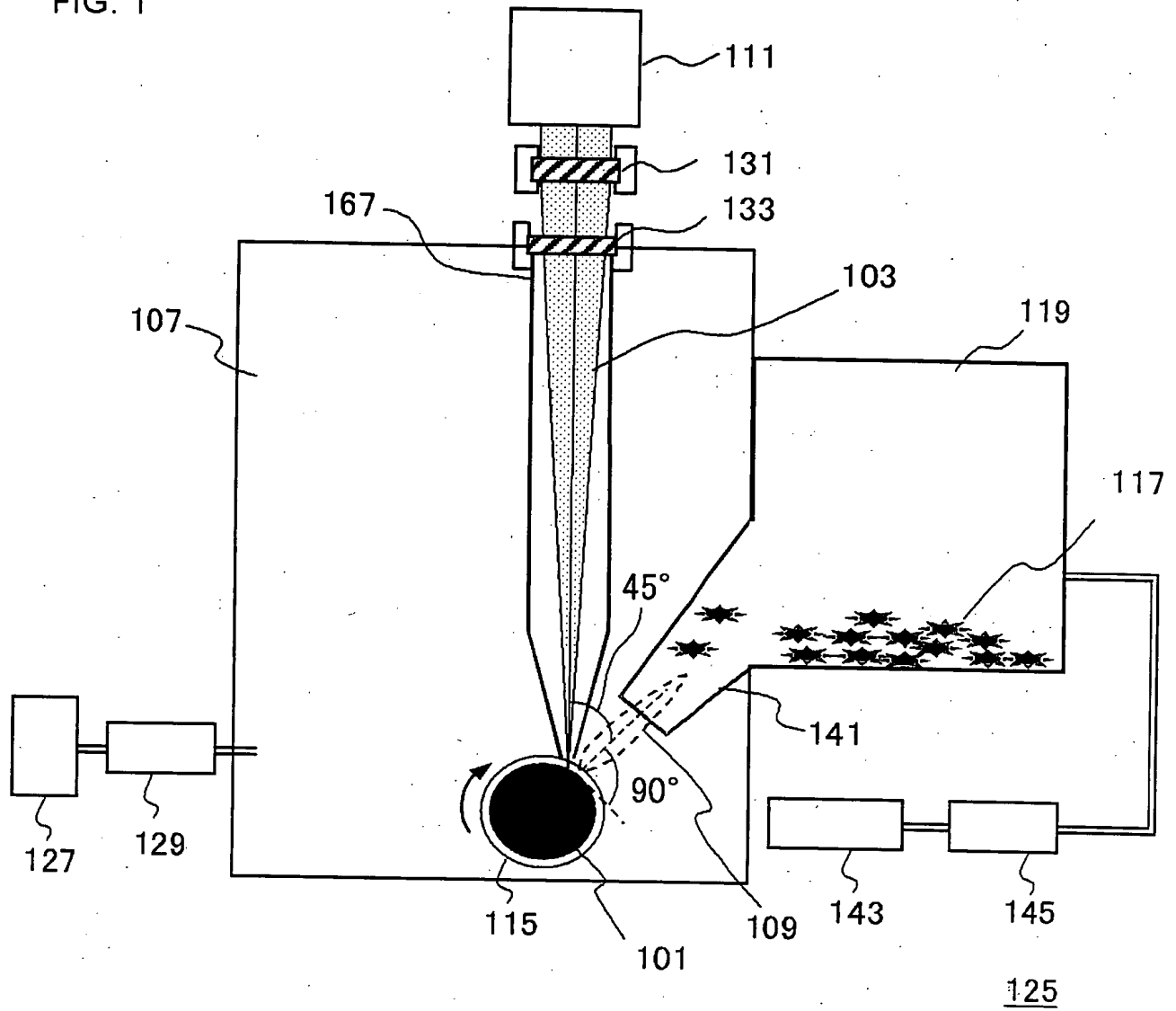


1 / 12

FIG. 1

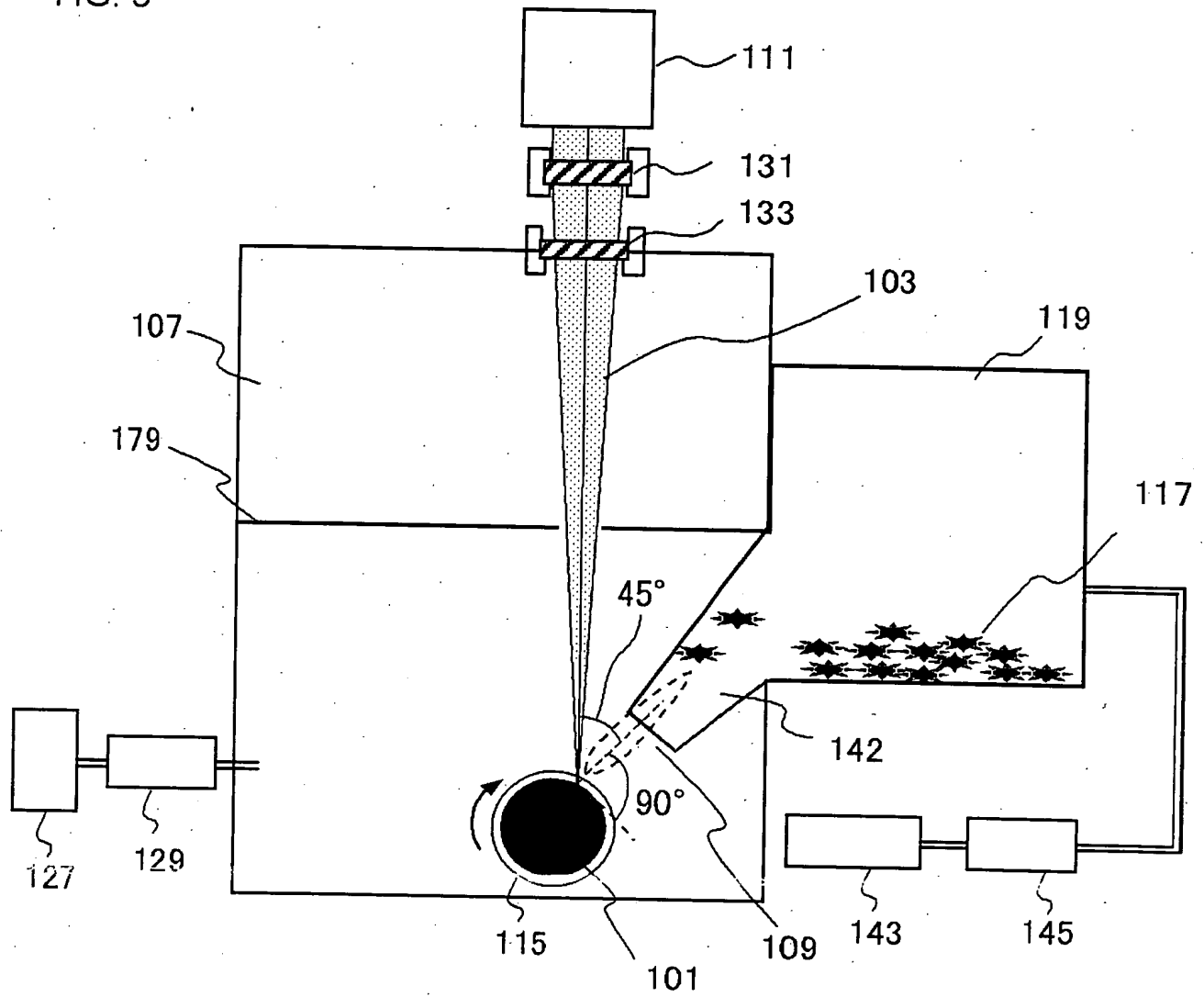


The diagram illustrates a laser-based measurement system. A laser source (111) emits a beam (103) through a series of optical components (131, 133, 167) and a lens (101) onto a target surface (107). The beam is focused at a point on the surface, creating a spot (115). The spot is shown at two different angles, 45° and 90°, indicating the range of measurement. A detector (109) is positioned to receive the reflected beam (141). The system is controlled by a computer (127) and a power supply (129). A control unit (143) and a power supply (145) are also shown. The target surface (107) is shown with a rough, irregular texture (117).

126

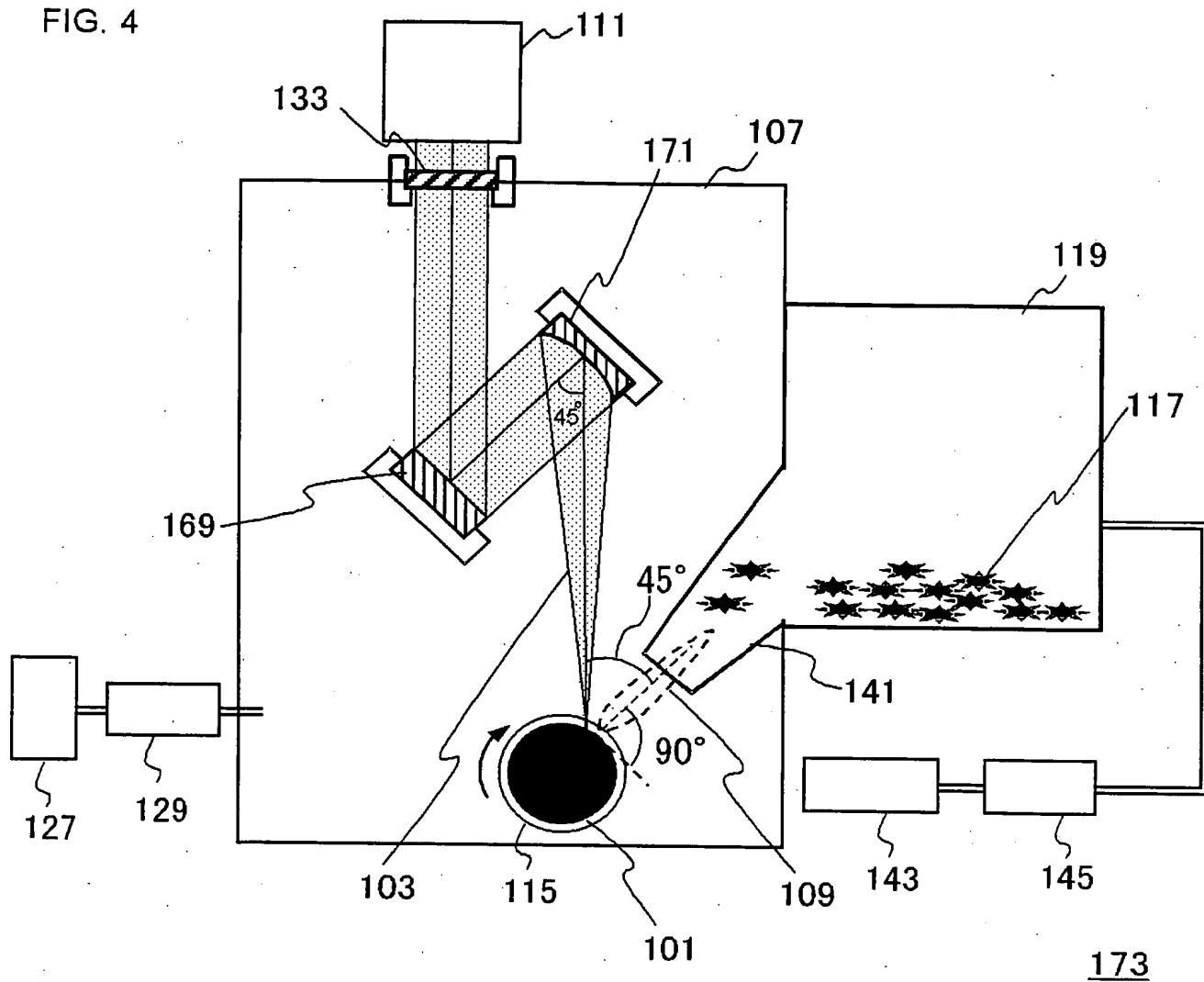
3 / 12

FIG. 3



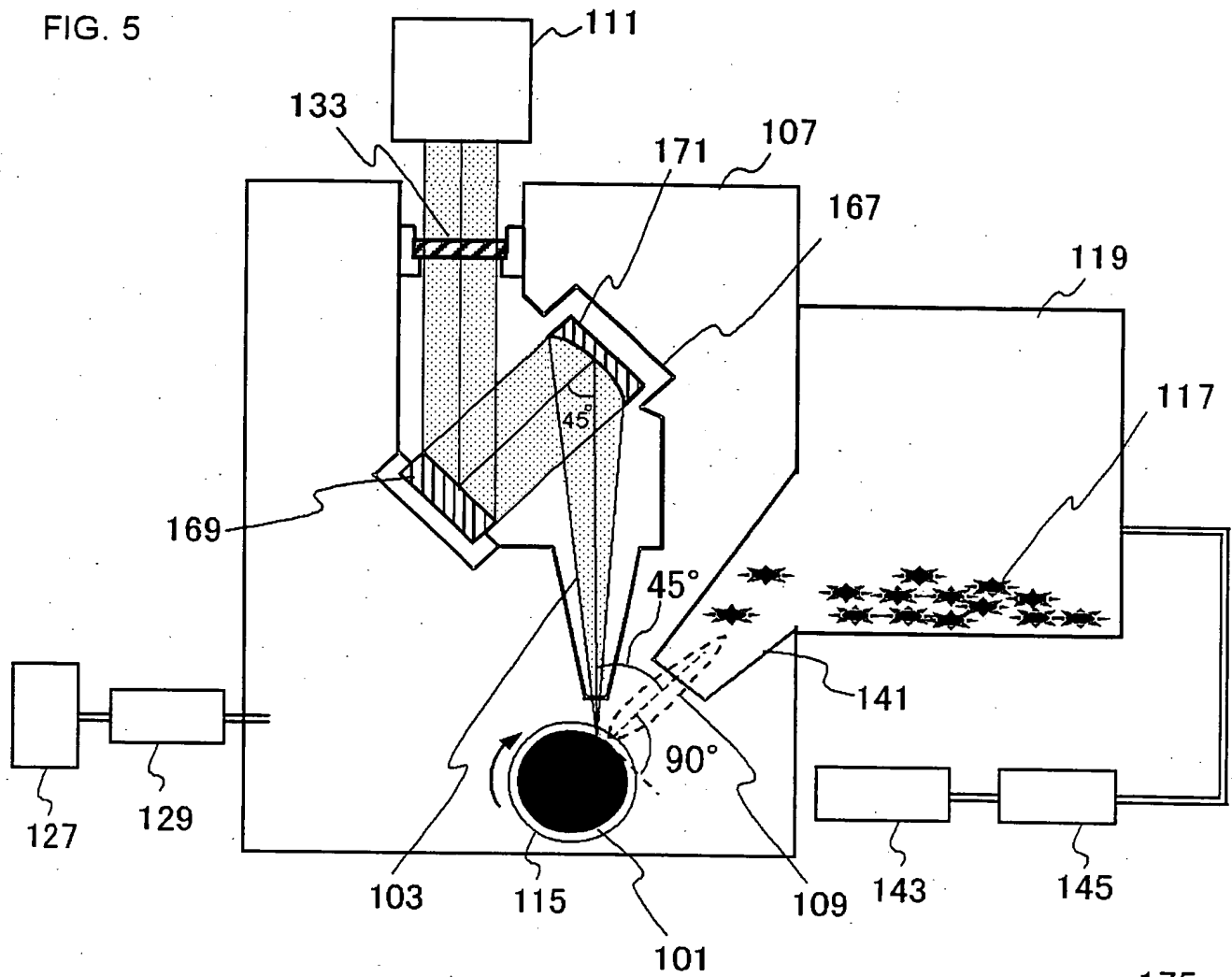
4 / 12

FIG. 4



5 / 12

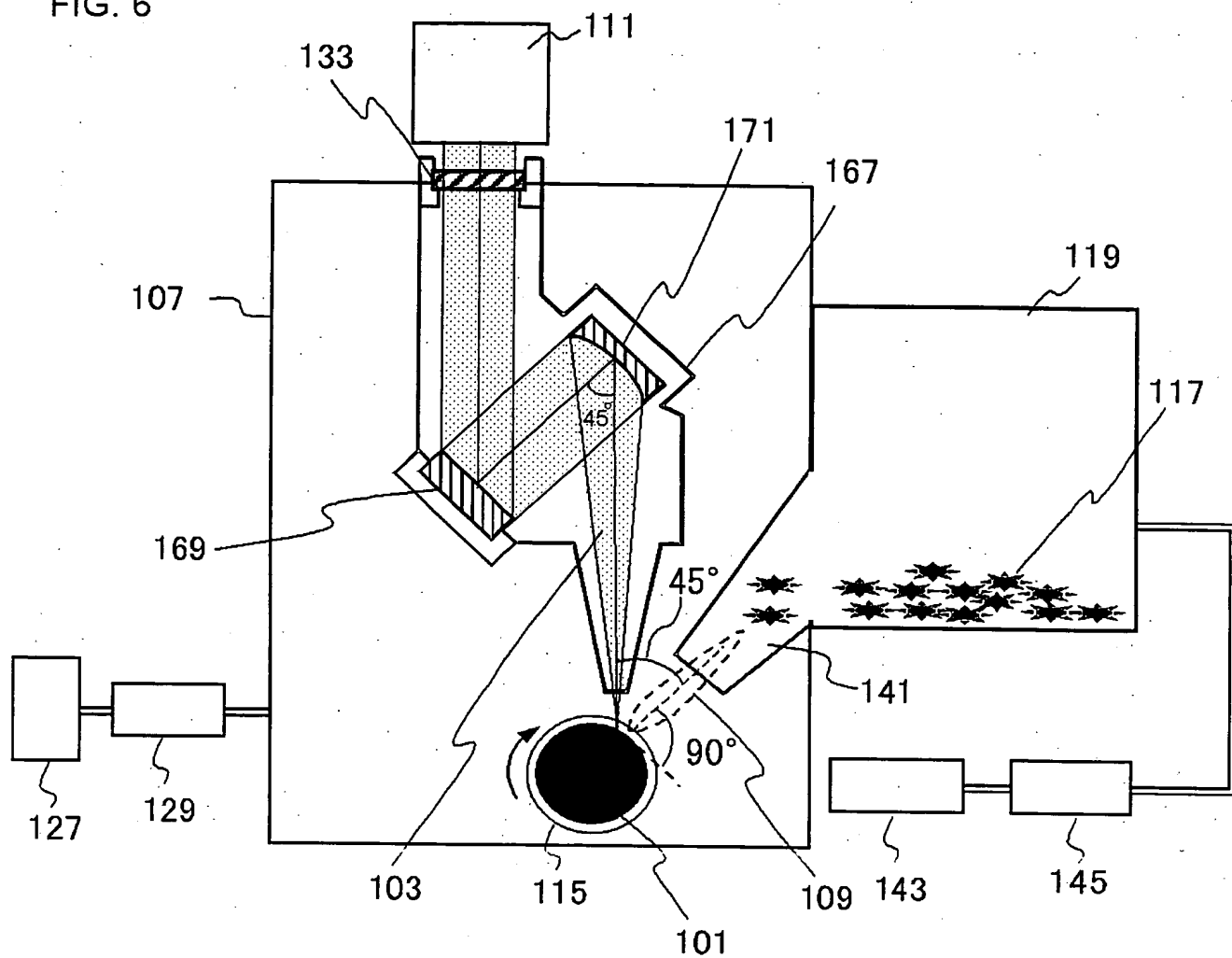
FIG. 5



175

6 / 12

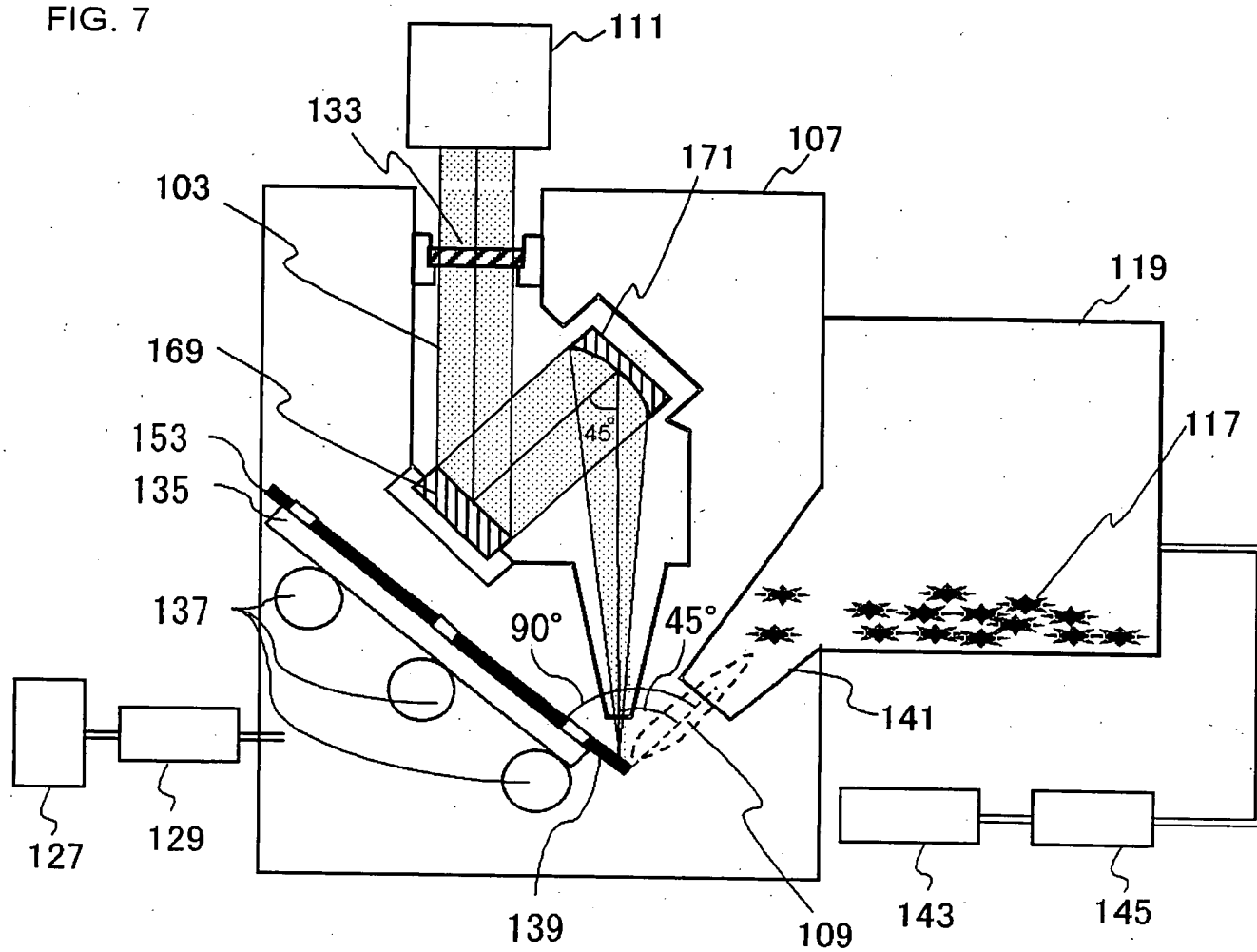
FIG. 6



176

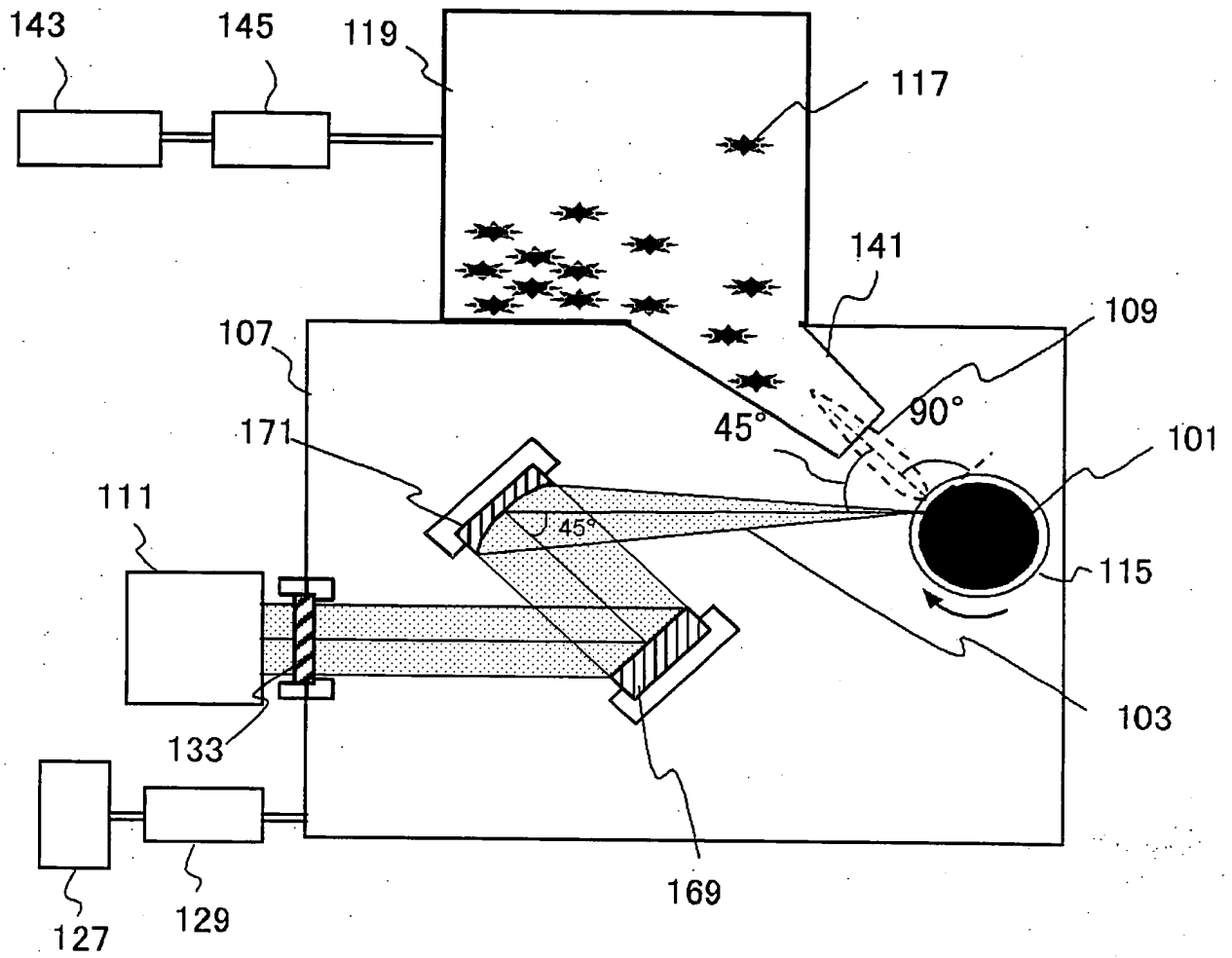
7 / 12

FIG. 7



177

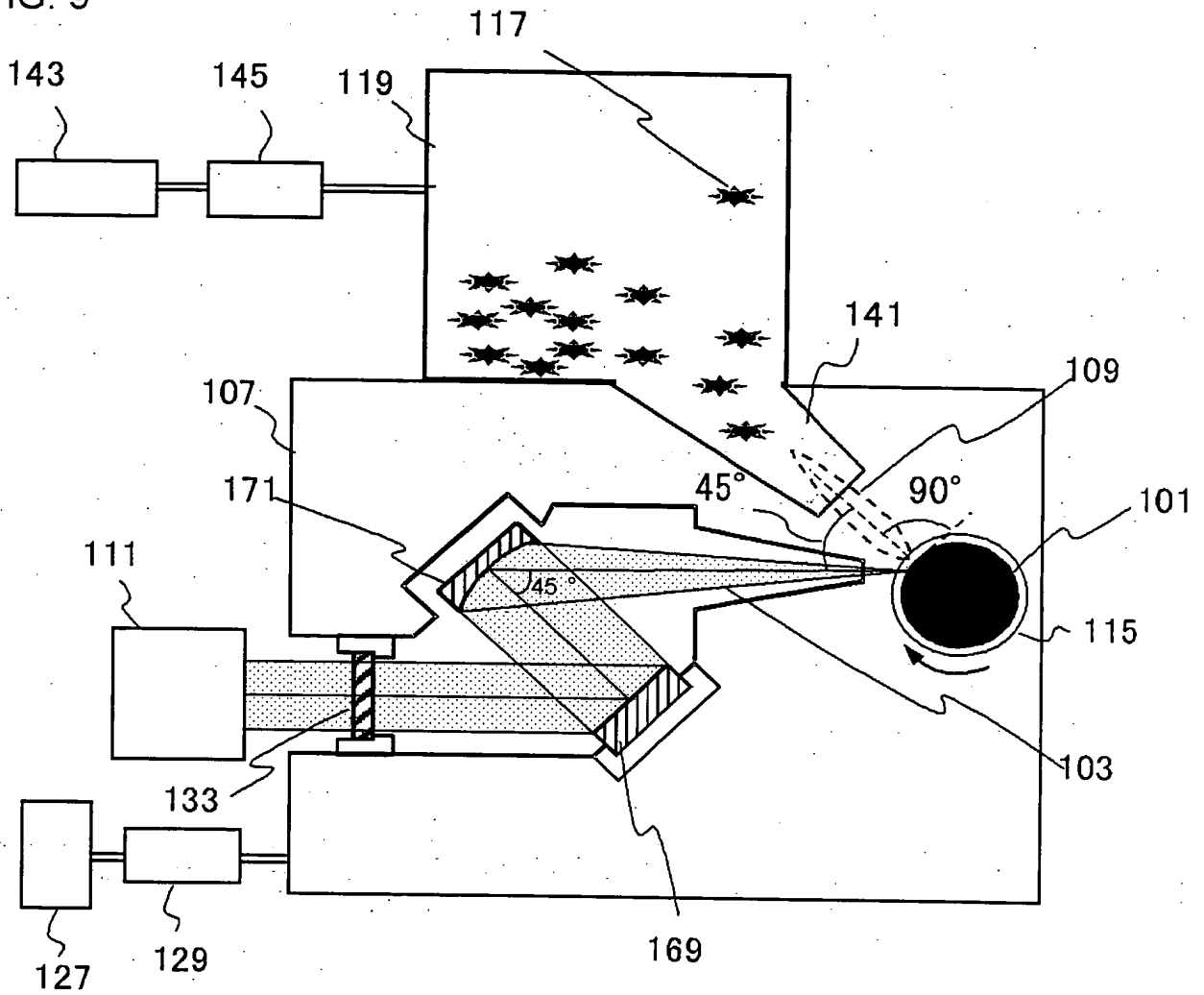
FIG. 8





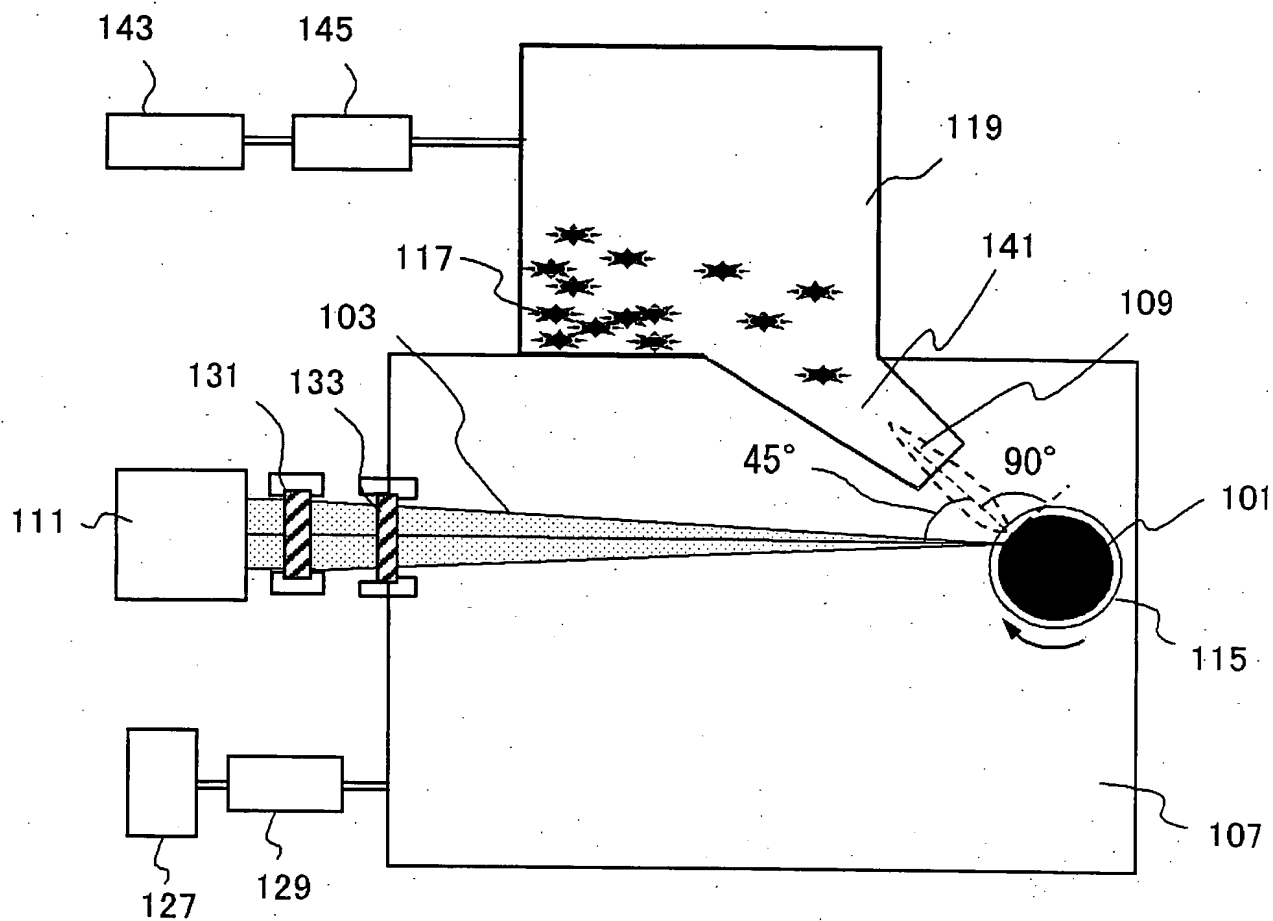
9 / 12

FIG. 9



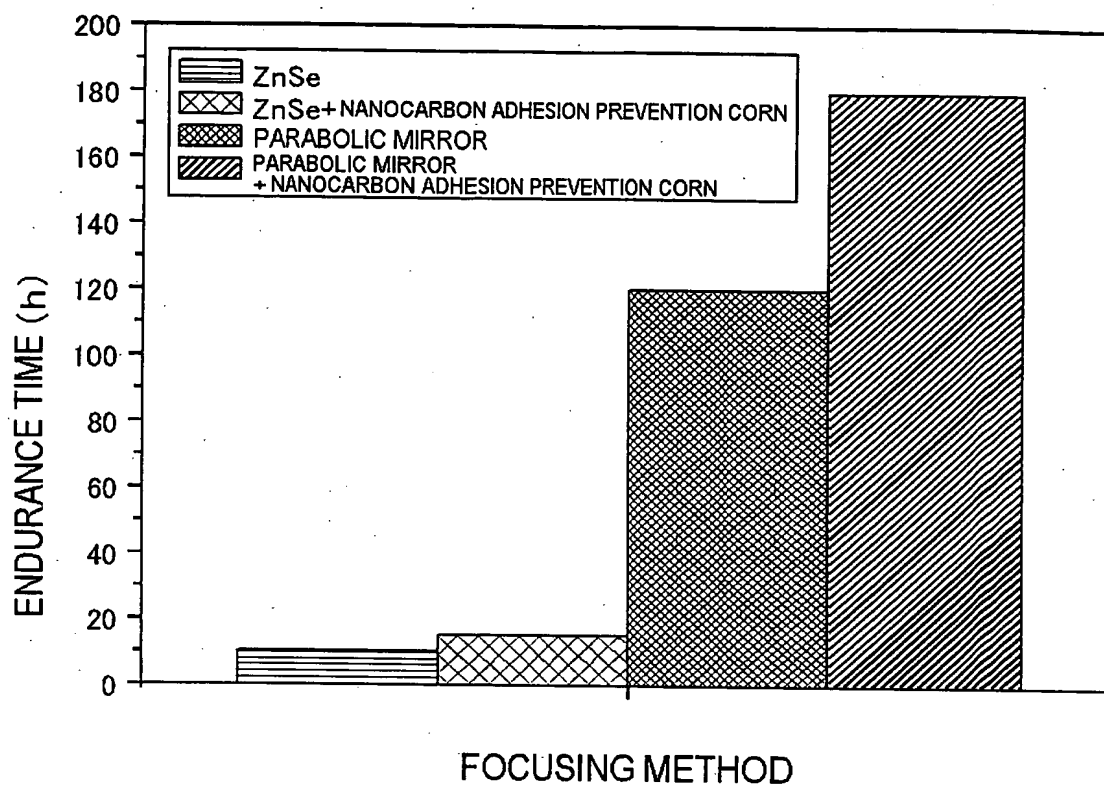
10 / 12

FIG. 10



11 / 12

FIG. 11



12 / 12

FIG. 12

